

Title (en)
CHARACTER RECOGNITION METHOD

Title (de)
VERFAHREN ZUR ERKENNUNG VON SCHRIFTZEICHEN

Title (fr)
PROCÉDÉ DE RECONNAISSANCE DE CARACTÈRES

Publication
EP 3570212 A1 20191120 (FR)

Application
EP 19174226 A 20190513

Priority
FR 1854140 A 20180517

Abstract (en)
[origin: US2019354791A1] A method for recognizing characters in an image of a document having at least one alphanumeric field. The method includes the steps of enhancing an image contrast to highlight the characters in the image; detecting contours of objects in the image to create a mask that highlights the characters; segmenting the image using a tree with connected components and applying the mask thereto in order to extract the characters from the image; performing a character recognition on the extracted objects. A device for implementing the method.

Abstract (fr)
Procédé de reconnaissance de caractères dans une image d'un document comprenant au moins un champ alphanumérique, le procédé comprenant les étapes de :- renforcer un contraste de l'image pour faire ressortir les caractères présents dans l'image ;- détecter des contours d'objets présents dans l'image pour créer un masque faisant ressortir les caractères ;- segmenter l'image en utilisant un arbre à composantes connexes et en lui appliquant le masque de manière à extraire de l'image les caractères ;- effectuer une reconnaissance de caractères sur les objets extraits. Dispositif pour la mise en oeuvre de ce procédé.

IPC 8 full level
G06K 9/00 (2006.01); **G06K 9/46** (2006.01); **G06K 9/52** (2006.01)

CPC (source: EP US)
G06T 5/94 (2024.01 - US); **G06V 10/435** (2022.01 - EP US); **G06V 10/457** (2022.01 - EP US); **G06V 30/413** (2022.01 - EP US); **G06T 2207/20208** (2013.01 - US); **G06T 2207/30176** (2013.01 - US); **G06V 2201/01** (2022.01 - US)

Citation (applicant)
• T. BÖTTGERD. GUTERMUTH, EDGE-BASED COMPONENT-TREES FOR MULTI-CHANNEL IMAGE SEGMENTATION, 4 May 2017 (2017-05-04), Retrieved from the Internet <URL:https://arxiv.org/pdf/1705.01906v1.pdf>
• EDWIN CALINET, A TREE OF SHAPES FOR MULTIVARIATE IMAGES, 27 November 2015 (2015-11-27), Retrieved from the Internet <URL:https://pastel.archives-ouvertes.fr/tel-01280131/document>

Citation (search report)
• [A] EP 3007105 A1 20160413 - MORPHO [FR]
• [I] TOBIAS BÖTTGER ET AL: "Edge-based Component-Trees for Multi-Channel Image Segmentation", 4 May 2017 (2017-05-04), XP055564077, Retrieved from the Internet <URL:https://arxiv.org/pdf/1705.01906v1.pdf> [retrieved on 20190304]
• [I] EDWIN CARLINET: "A Tree of shapes for multivariate images", 27 November 2015 (2015-11-27), XP055564024, Retrieved from the Internet <URL:https://pastel.archives-ouvertes.fr/tel-01280131/document> [retrieved on 20190304]
• [A] JIAN LIANG ET AL: "Camera-based analysis of text and documents: a survey", INTERNATIONAL JOURNAL ON DOCUMENT ANALYSIS AND RECOGNITION., vol. 7, no. 2-3, 1 July 2005 (2005-07-01), DE, pages 84 - 104, XP055564069, ISSN: 1433-2833, DOI: 10.1007/s10032-004-0138-z

Cited by
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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3570212 A1 20191120; FR 3081244 A1 20191122; FR 3081244 B1 20200529; US 11151402 B2 20211019; US 2019354791 A1 20191121

DOCDB simple family (application)
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